

(34) POSITIONING SYSTEM AND POSITION MEASURING METHOD FOR USE IN EXPOSURE APPARATUS

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## (57) ABSTRACT

A positioning system includes a movable member being movable along a reference plane containing first and second directions, and a position measuring device for measuring positional information related to the movable member, wherein the movable member includes an element having a reflection surface inclined with respect to the reference plane, and wherein the position measuring device includes a measuring system for causing a measurement beam to be reflected by the inclined reflection surface and for detecting positional information related to the movable member with respect to a direction intersecting the reference plane.

**63 Claims, 29 Drawing Sheets**

